

RECEIVED

DEC 10 2001

TECH CENTER 1600/2900

1600

A13

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/530,061

DATE: 12/05/2001

TIME: 13:17:01

Input Set : A:\Sp102001.app

Output Set: N:\CRF3\11212001\I530061.raw

ENTERED

3 <110> APPLICANT: Notomi, Tsugunori
 4 Hase, Tetsu
 6 <120> TITLE OF INVENTION: METHOD OF SYNTHESIZING NUCLEIC ACID
 8 <130> FILE REFERENCE: 201487/1020
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/530,061
 C--> 11 <141> CURRENT FILING DATE: 2000-04-21
 13 <150> PRIOR APPLICATION NUMBER: PCT/JP99/06213
 14 <151> PRIOR FILING DATE: 1999-11-08
 16 <150> PRIOR APPLICATION NUMBER: JP-1998-317476
 17 <151> PRIOR FILING DATE: 1998-11-09
 19 <160> NUMBER OF SEQ ID NOS: 29
 21 <170> SOFTWARE: PatentIn Ver. 2.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 52
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Artificial Sequence
 28 <220> FEATURE:
 29 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
 30 synthesized primer sequence
 32 <400> SEQUENCE: 1
 33 cgactctaga ggatccccgg gtacttttg ttgtgtggaa ttgtgagcgg at 52
 36 <210> SEQ ID NO: 2
 37 <211> LENGTH: 51
 38 <212> TYPE: DNA
 39 <213> ORGANISM: Artificial Sequence
 41 <220> FEATURE:
 42 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
 43 synthesized primer sequence
 45 <400> SEQUENCE: 2
 46 acaacgtcggt gactggaaaa acccttttg tgcgggcctc ttgcgttatata c 51
 49 <210> SEQ ID NO: 3
 50 <211> LENGTH: 21
 51 <212> TYPE: DNA
 52 <213> ORGANISM: Artificial Sequence
 54 <220> FEATURE:
 55 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
 56 synthesized primer sequence
 58 <400> SEQUENCE: 3
 59 actttatgct tccggctcgta 21
 62 <210> SEQ ID NO: 4
 63 <211> LENGTH: 17
 64 <212> TYPE: DNA
 65 <213> ORGANISM: Artificial Sequence
 67 <220> FEATURE:
 68 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
 69 synthesized primer sequence
 71 <400> SEQUENCE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/530,061

DATE: 12/05/2001
TIME: 13:17:01

Input Set : A:\Spl02001.app
Output Set: N:\CRF3\11212001\I530061.raw

72	gttgggaagg	gcatcg	17				
75	<210>	SEQ ID NO: 5					
76	<211>	LENGTH: 600					
77	<212>	TYPE: DNA					
78	<213>	ORGANISM: Bacteriophage M13mp18					
80	<400>	SEQUENCE: 5					
81	gcgcccaata	cgaaaccgc	ctctccccgc	gcgttggccg	attcattaaat	gcagctggca	60
82	cgacagggtt	cccgactgga	aagcgggcag	tgagcgcaac	gcaattaatg	ttagtttagct	120
83	cactcattag	gcaccccagg	ctttacactt	tatgcttccg	gctcgatgt	tgtgtggaat	180
84	tgtgagcga	taacaatttc	acacaggaaa	cagctatgac	catgattacg	aattcgagct	240
85	cggtagccgg	ggatccctta	gagtcgaccc	gcaggcatgc	aagttggca	ctggccgtcg	300
86	ttttacaacg	tcgtgactgg	aaaaaccctg	gcgttaccca	acttaatcgc	cttgcagcac	360
87	atccccctt	cgccagctgg	cgtaatagcg	aagaggcccg	caccgatcgc	ccttcccaac	420
88	agttgcgcag	cctgaatggc	aatggcgct	ttgcctgggt	tccggcacca	gaagcgggtgc	480
89	cggaaagctg	gctggagtgc	gatcttcctg	aggccgatac	ggtcgtcgtc	ccctcaaact	540
90	ggcagatgca	cgttacgat	gcccacatct	acaccaacgt	aacctatccc	attacggtca	600
93	<210>	SEQ ID NO: 6					
94	<211>	LENGTH: 63					
95	<212>	TYPE: DNA					
96	<213>	ORGANISM: Artificial Sequence					
98	<220>	FEATURE:					
99	<223>	OTHER INFORMATION: Description of Artificial Sequence: Artificially					
100	synthesized primer sequence						
102	<400>	SEQUENCE: 6					
103	ctttccaaa	agtaaggcag	gaaatgtgaa	accagatcgt	aatttggaa	accagcatc	60
104	cag						63
107	<210>	SEQ ID NO: 7					
108	<211>	LENGTH: 43					
109	<212>	TYPE: DNA					
110	<213>	ORGANISM: Artificial Sequence					
112	<220>	FEATURE:					
113	<223>	OTHER INFORMATION: Description of Artificial Sequence: Artificially					
114	synthesized primer sequence						
116	<400>	SEQUENCE: 7					
117	gtggattcgc	actcccccgc	ctgatcggga	cctgcctcg	cgt		43
120	<210>	SEQ ID NO: 8					
121	<211>	LENGTH: 16					
122	<212>	TYPE: DNA					
123	<213>	ORGANISM: Artificial Sequence					
125	<220>	FEATURE:					
126	<223>	OTHER INFORMATION: Description of Artificial Sequence: Artificially					
127	synthesized primer sequence						
129	<400>	SEQUENCE: 8					
130	gccacctggg	tggaa					16
133	<210>	SEQ ID NO: 9					
134	<211>	LENGTH: 22					
135	<212>	TYPE: DNA					
136	<213>	ORGANISM: Artificial Sequence					
138	<220>	FEATURE:					

RAW SEQUENCE LISTING DATE: 12/05/2001
PATENT APPLICATION: US/09/530,061 TIME: 13:17:01

Input Set : A:\Sp102001.app
Output Set: N:\CRF3\11212001\I530061.raw

INFORMATION: Description of Artificial Sequence: Artificially
esized primer sequence
ENCE: 9
ttcttcttct ag 22
D NO: 10
H: 430
DNA
ISM: Hepatitis B virus
NCE: 10
ccgcctctgc tctgtatcg gaggccttag agtctccgga acattgttca 60
cagcactcag gcaagctatt ctgtgtggg gtgagttaat gaatctggcc 120
aaagtaattt ggaagaccca gcattccagg aatttagtagt cagctatgtc 180
tgggcctaataa aatcagacaa ctattgttgt ttcacatttc ctgccttaact 240
aaactgtttt ggagtatttg gtatctttt gagtgtggat tcgcactcct 300
gaccaccaaaa tgcccctatc ttatcaaacac ttccggaaac tactgttgtt 360
gcaggtcccc tagaagaaga actccctcgc ctcgcagacg aaggctcaa 420
430

D NO: 11
H: 293
DNA
ISM: Artificial Sequence
RE:
INFORMATION: Description of Artificial Sequence: Artificially
esized sequence
ENCE: 11
gactggggaaa accctttttg tgcgggcctc ttgcgttatta cgccagctgg 60
atgtgtcgca aggcgattaa gttgggtaac gccagggttt tcccaagtac 120
aacgacggcc agtgccaagc ttgcattgcgc gcaggctcgac tctagaggat 180
cgagctcgaa ttgtatca ttgtcatagc ttgttccctgt gtgaaattgt 240
caattccaca caacaaaaag taccgggaa tcctcttagag tcg 293

D NO: 12
H: 293
DNA
ISM: Artificial Sequence
RE:
INFORMATION: Description of Artificial Sequence: Artificially
esized sequence
ENCE: 12
ggatccccgg gtactttttg ttgtgtggaa ttgtgagcgg ataacaattt 60
acagctatga ccatgattac gaattcgagc tgggtacccg gggatcctct 120
tgcaggcatg caagcttggc actggccgtc gttttacaac gtcgtgactg 180
ggcggttaccc aacttaatcg cttgcagca catccccctt tcgccagctg 240
aaagaggccc gcacaaaaag gttttccca gtcacgacgt tgt 293

D NO: 13
H: 459
DNA
ISM: Artificial Sequence
RE:
INFORMATION: Description of Artificial Sequence: Artificially

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/530,061

DATE: 12/05/2001
TIME: 13:17:01

Input Set : A:\Spl02001.app
Output Set: N:\CRF3\11212001\I530061.raw

203 synthesized sequence
205 <400> SEQUENCE: 13
206 acaacgtcgt gactggaaa acccttttg tgcgggcctc ttgcgttatta cgccagctgg 60
207 cggaaaggggg atgtgtgcga aggcgattaa gttggtaac gccagggttt tcccagtac 120
208 gacgttgtaa aacgacggcc agtgcgaac ttgcgttgcct gcaggtcgac tctagaggat 180
209 cccccgggtac cgagctcgaa ttgcgttataca tggtcatagc tggttcgtgt gtgaaattgt 240
210 tatccgctca caattccaca caacaaaaag taccgggaa tcctcttagag tcgacctgca 300
211 ggcgtacaaag ctggcactg gccgtcggtt tacaacgtcg tgactggaa aaccctggcg 360
212 ttacccaact taatgcctt gcagcacatc ccccttcgc cagctggcgt aatagcgaag 420
213 agccccgcac aaaaagggtt ttcccagtca cgacgttgt 459
216 <210> SEQ ID NO: 14
217 <211> LENGTH: 458
218 <212> TYPE: DNA
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
223 synthesized sequence
225 <400> SEQUENCE: 14
226 cgactctaga ggatccccgg gtacttttg ttgtgtggaa ttgtgagcgg ataacaattt 60
227 cacacaggaa acagctatga ccatgattac gaattcgagc tcgggtacccg gggatccct 120
228 agagtcgacc tgcaggcatg caagcttggc actggccgtc gttttacaac gtctgtactg 180
229 gaaaaaccct ggcgttaccc aacttaatcg ctttcgtacca catccccctt tcgcccagctg 240
230 gcttaatagc gaagaggccc gcacaaaaag gttttccca gtcacgttg tgtaaaacga 300
231 cggccagtgc caagcttgc tgcctgcagg tcgactctag aggtaccccg ggtaccgagc 360
232 tcgaattcgt aatcatggc atagctgtt cctgtgtgaa attgttatcc gtcacacaattt 420
233 ccacacaaca aaaaaggatccc ggggtatcc tagatcg 458
236 <210> SEQ ID NO: 15
237 <211> LENGTH: 790
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
243 synthesized sequence
245 <400> SEQUENCE: 15
246 acaacgtcgt gactggaaa acccttttg tgcgggcctc ttgcgttatta cgccagctgg 60
247 cggaaaggggg atgtgtgcga aggcgattaa gttggtaac gccagggttt tcccagtac 120
248 gacgttgtaa aacgacggcc agtgcgaac ttgcgttgcct gcaggtcgac tctagaggat 180
249 cccccgggtac cgagctcgaa ttgcgttataca tggtcatagc tggttcgtgt gtgaaattgt 240
250 tatccgctca caattccaca caacaaaaag taccgggaa tcctcttagag tcgacctgca 300
251 ggcgtacaaag ctggcactg gccgtcggtt tacaacgtcg tgactggaa aaccctggcg 360
252 ttacccaact taatgcctt gcagcacatc ccccttcgc cagctggcgt aatagcgaag 420
253 agccccgcac aaaaagggtt ttcccagtca cgacgttgta aaacgacggc cagtgccaaag 480
254 ctgcgtatgc tgcagtcga ctctagaga tccccgggtt cttttgttg tggatggattt 540
255 tgagcggata acaatttcac acaggaaaca gctatgacca tgattaccaa ttgcgtcg 600
256 gtacccgggg atcctctaga gtcgacctgc aggcatgca gcttggact ggcgtcggtt 660
257 ttacaaacgtc gtgactggaa aaaccctggc gttacccaac ttaatgcct tgacgacat 720
258 ccccccttcgc ccagctggcg taatagcga gaggccgc aaaaaagggt ttcccagtca 780
259 acgacgttgt 790
262 <210> SEQ ID NO: 16

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/530,061

DATE: 12/05/2001
TIME: 13:17:02

Input Set : A:\Sp102001.app
Output Set: N:\CRF3\11212001\I530061.raw

263 <211> LENGTH: 789
264 <212> TYPE: DNA
265 <213> ORGANISM: Artificial Sequence
267 <220> FEATURE:
268 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
269 synthesized sequence
271 <400> SEQUENCE: 16
272 cgactctaga ggatccccgg gtacttttg ttgtgtggaa ttgtgagcgg ataacaattt 60
273 cacacaggaa acagctatga ccatgattac gaattcgagc tcggtaacccg gggatcctct 120
274 agagtcgacc tgcaggcatg caagcttggc actggccgtc gtttacaac gtcgtgactg 180
275 gaaaaaccct ggcgttaccc aacttaatcg ctttcagca catccccctt tcgcccagctg 240
276 gcgttaatgc gaagaggccc gcacaaaaag gttttccca gtcacgacgt tgtaaaacga 300
277 cggccagtgc caagcttgca tgcctgcagg tcgactctag aggtatccccg ggtaccgagc 360
278 tcgaattcgt aatcatggtc atagctgttt cctgtgtgaa attgttatcc gtcacataatt 420
279 ccacacaaca aaaagtaccc ggggatccctc tagagtcgac ctgcaggcat gcaagcttgg 480
280 cactggccgt cgtttacaa cgctgtgact gggaaaaaccct ttttgcgc ggcctctcg 540
281 ctattacgcgca agctggcga aaaaaaaaaatgt gctgcaaggc gattaagttt ggttaacgcca 600
282 gggtttccca agtcacgacg ttgtaaaacg acggccagtg ccaagcttgc atgcctgcag 660
283 gtcgactcta gaggatcccc gggtaccgag ctcgaattcg taatcatgtt catacgcttt 720
284 tcctgtgtga aattgttatac cgctcacaat tccacacaaac aaaaagtacc cggggatccct 780
285 cttagatcg 789
288 <210> SEQ ID NO: 17
289 <211> LENGTH: 310
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence
293 <220> FEATURE:
294 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
295 synthesized sequence
297 <400> SEQUENCE: 17
298 gtggattcgc actccctcccg ctgatcgaaa cctgcctcgt cgctctaacaa cagtagttc 60
299 cggaaatgtt gataagatag gggcattttgg tggctctgtaa gcggggaggag tgcaaatcca 120
300 cactccaaaaa gataccaaat actccaaaaac agtttctttt cccaaatggaaat ggcaggaaat 180
301 gtgaaaccac aatagttgtc tgatTTTtag gcccatttta acattgacat agctgactac 240
302 taattccctgt gatgctgggt cttccaaattt acgatctggt ttcacatttc ctgccttact 300
303 ttggaaagag 310
306 <210> SEQ ID NO: 18
307 <211> LENGTH: 465
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Description of Artificial Sequence: Artificially
313 synthesized sequence
315 <400> SEQUENCE: 18
316 gtggattcgc actccctcccg ctgatcgaaa cctgcctcgt cgctctaacaa cagtagttc 60
317 cggaaatgtt gataagatag gggcattttgg tggctctgtaa gcggggaggag tgcaaatcca 120
318 cactccaaaaa gataccaaat actccaaaaac agtttctttt cccaaatggaaat ggcaggaaat 180
319 gtgaaaccac aatagttgtc tgatTTTtag gcccatttta acattgacat agctgactac 240
320 taattccctgt gatgctgggt cttccaaattt acgatctggt ttcacatttc ctgccttact 300
321 ttggaaagag aaactgtttt ggagtatttg gtatTTTg gagtgtggat tcgcactccct 360

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/530,061

DATE: 12/05/2001
TIME: 13:17:03

Input Set : A:\Sp102001.app
Output Set: N:\CRF3\11212001\I530061.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date